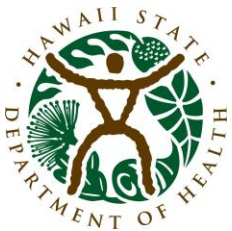


Adverse Life Experiences (ALE) and Health

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Acknowledgement

Ms. Shu Liang, research statistician IV prepared the statistical runs and statistical slides for this presentation.

Definition

Adverse life experiences (ALE) in this presentation refers to the experiences of intimate partner violence (IPV) and unwanted sex including attempted unwanted sex.

Rape in this presentation is the experience of unwanted sex including attempted unwanted sex.

Purpose

- 1) Show that estimate of rape may require a battery of questions;
- 2) Estimate the prevalence of rape including attempted rape;
- 3) Estimate the prevalence of IPV; and
- 4) Show the association between ALE, health and health practices.
- 5) Show that unhealthy behaviors and conditions are more common among adults with recent adverse life experiences than other victims of distant past and non-victims.

The Healthy People 2010 objectives:

- HP15-34 relating to reduction of physical assault by current or former intimate partners
- HP15-35 relating to reduction in the annual rate of rape or attempted rape

Data Source: Hawaii BRFSS 2006 to 2008

Questions from SV module used presentation:

Now I am going to ask you about unwanted sex. Unwanted sex includes things like putting anything into your vagina (if female), anus or mouth or making you do these things to them after you said or showed that you didn't want to. It includes times when you were unable to consent, for example, you were drunk or asleep, or you thought you would be hurt or punished if you refused.

Are you in a safe place? If yes continue.....

Note: First two questions relates to unwanted touching and sexual exposures without touching (not included in this discussion).

Cont. Data Source Questions from SV module

- *Has anyone EVER had sex with you after you said or showed that you didn't want them to or without your consent?*
 - *Has this happened in the past 12 months?*
- *Has anyone EVER ATTEMPTED to have sex with you after you said or showed that you didn't want to or without your consent, BUT SEX DID NOT OCCUR?*
 - *Has this happened in the past 12 months?*
- *Think about the time of the most recent incident involving a person who had sex with you –or- attempted to have sex with you after you said or showed that you didn't want to or without your consent? What was that person's relationship to you?*

Cont. Data Source Questions from IPV module

- *The next questions are about violence in relationships with an intimate partner. By an intimate partner I mean any current or former spouse, boyfriend, or girlfriend. Someone you were dating, or romantically or sexually involved with would also be considered an intimate partner.*

Are you in a safe place to answer these questions? If answer is yes, continue.

1. *Has an intimate partner EVER THREATENED you with physical violence? This includes threatening to hit, slap, push, kick, or hurt you in any way.*

Cont. Data Source Questions from IPV module

2. *Has an intimate partner EVER ATTEMPTED physical violence against you? This includes times when they tried to hit, slap, push, kick, or otherwise hurt you. BUT THEY WERE NOT ABLE TO.*
3. *Has an intimate partner EVER hit, slapped, pushed, kicked, or hurt you in any way?*

Now I am going to ask you some additional questions about unwanted sex. It may seem like you have already answered these questions. Although the questions are very similar to some that I may have already asked, it is important that we also ask them here.

Cont. Data Source Questions from IPV module

4. Have you EVER experienced any unwanted sex by a current or former intimate partner?

Note : Was asked only if answer to questions 3 or 4 is yes.

5. In the past 12 months, have you experienced any physical violence or had unwanted sex with an intimate partner?

At the time of the most recent incident involving an intimate partner who ***was physically violent*** –or- ***had unwanted sex*** with you, what was that person's relationship to you?

Cont. Data source sample

Table 1. Sample size of the IPV and SV modules and as a percentage of total respondents to core questions by survey calendar year, HBRFSS 2006-2008.

Sample size	2006	2007	2008	2006-2008 total
Total #	6,378	6,449	6,311	19,138
Completed SV module # (%)	6,003 (94%)	6,291 (98%)	6,100 (97%)	18,394 (96%)
Completed IPV module # (%)	5878 (92%)	6202 (96%)	6033 (96%)	18113 (95%)

CASRO rate is 52.3%, 48.0% and 49.1% from 2006 to 2008 respectively.

Method

Questions from the SV module and Questions 4 & 5 from the IPV module were use to estimate rape.

Rationale: Examination of data showed that respondent answered 'NO' to SV questions but answered 'YES' to question 4 thus underestimating the prevalence of rape if based solely on SV module.

Cont. Method

IPV estimate is from the IPV module questions 1 to 4 plus respondent that answered the SV module in which the perpetrator are the intimate partners but answered no in the IPV module or dropped out.

‘Have ever been’ questions were used to measure lifetime prevalence.

‘... in the past 12 months’ were used to measure current prevalence.

- Stratification Analysis using SUDAAN Crosstab procedure
- Multivariate analysis using SUDAAN Rlogist procedure

95% CI interval for all estimates.

alpha=5% for test of significant difference

Limitations

Prevalence estimates may be underestimated:

- *Only households with a landline phones were included in the survey;*
- *Non-English speakers, institutionalized, and severely impaired individuals were not able to participate in the survey ;*
- *Respondents recall bias or selective recollection;*
- *Cultural background and intergenerational experience may had impeded respondent in determining normal relationship as oppose to IPV relationship;*
- *Interviewer bias or hesitancy or reluctance in asking the questions.*

Only associations between variables can be inferred, meaning no causal relationship can be concluded or inferred between IPV, SV, chronic disease and risk behavior variables and socio-demographic variables because the data is cross sectional.

Results: Rape

Table 2. Lifetime and current prevalence of rape by gender, source: SV module

	2006 % (95% CI)	2007 % (95% CI)	2008 % (95% CI)	2006-2008 % (95% CI)
Lifetime prevalence of rape				
Female	12.6 (11.2-14.1)	10.9 (9.7 - 12.2)	11.8 (10.5-13.2)	11.7 (11.0-12.6)
Male	4.0 (3.1-5.2)	4.1 (3.1 - 5.3)	3.6 (2.7 - 4.7)	3.9 (3.3 - 4.5)
State	8.3 (7.5-9.3)	7.5 (6.7 - 8.4)	7.7 (6.9 - 8.6)	7.8 (7.4 - 8.4)
Current prevalence of rape				
Female	0.9 (0.6 - 1.5)	1.0 (0.5 - 1.7)	1.2 (0.8 - 1.8)	1.0 (0.8 - 1.4)
Male	0.7 (0.3 - 1.5)	1.5 (0.9 - 2.6)	1.1 (0.6 - 2.0)	1.1 (0.8 - 1.6)
State	0.8 (0.5 - 1.3)	1.2 (0.8 - 1.9)	1.1 (0.8 - 1.6)	1.1 (0.9 - 1.4)

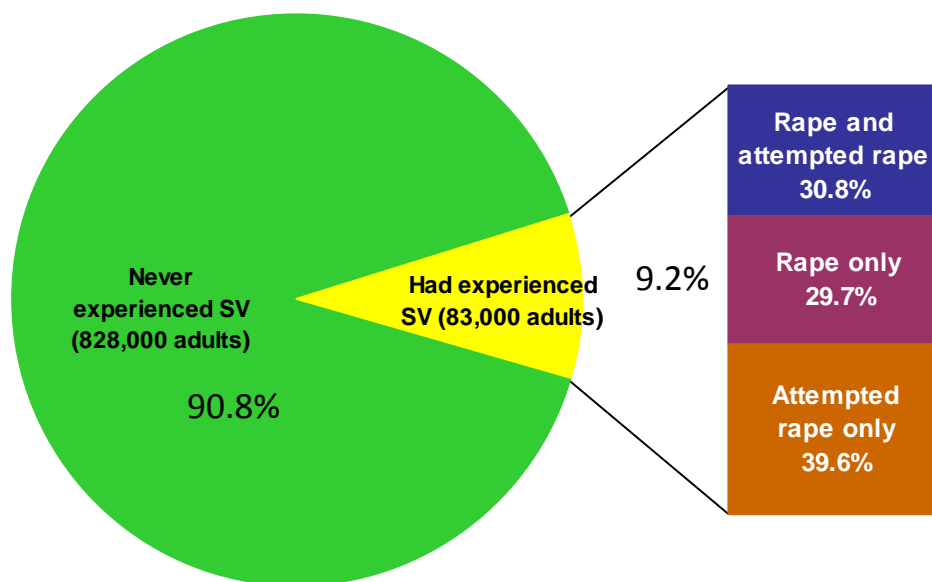
Table 2B. Lifetime and current prevalence of rape by gender, source: SV + Q4, Q5 of IPV module

	2006 % (95% CI)	2007 % (95% CI)	2008 % (95% CI)	2006-2008 % (95% CI)
Lifetime prevalence of rape				
Female	14.7 (13.3-16.3)	13.1 (11.7-14.5)	14.1 (12.6-15.6)	13.9 (13.1-14.8)
Male	4.2 (3.3-5.4)	4.4 (3.3-5.7)	4.2 (3.3-5.5)	4.3 (3.7-5.0)
State	9.5 (8.6-10.5)	8.8 (7.9-9.7)	9.2 (8.3-10.2)	9.2 (8.6-9.7)
Current prevalence of rape				
Female	1.1 (0.7-1.7)	1.3 (0.8-2.2)	1.6 (1.1-2.3)	1.3 (1.0-1.7)
Male	0.7 (0.3-1.5)	1.5 (0.9-2.6)	1.2 (0.7-2.2)	1.2 (0.8-1.7)
State	0.9 (0.6-1.3)	1.4 (1.0-2.1)	1.4 (1.0-2.0)	1.3 (1.0-1.6)

Prevalence for women, higher compare to Table 2, above.

Results

Figure 1. Lifetime prevalence of rape and attempted rape in Hawaii, HBRFSS 2006-2008



Lifetime rape prevalence including attempted by Gender, HBRFSS 2006-2008

A/R*	%	95% CI	CI
Female	4.6	4.1	5.1
Male	0.7	0.5	1.1
State	2.8	2.6	3.2
Raped			
Female	4.6	4.1	5.1
Male	0.8	0.6	1.2
State	2.7	2.5	3.0
Attempted			
Female	4.4	3.9	5.0
Male	2.7	2.3	3.3
State	3.6	3.2	4.0

*Attempted and raped

Express as percentage of all rape by gender

	Female	95% CI	Male	95% CI
A/R*	35.3	32.3 38.5	16.4	11.3 23.2
Raped	33.0	30.0 36.1	19.7	14.7 25.9
Attempted	31.7	28.7 34.9	63.9	56.4 70.8

Results: IPV

Table 3. Lifetime and current prevalence of IPV by gender, IPV model

	2006 % (95% CI*)	2007 % (95% CI)	2008 % (95% CI)	2006-2008 % (95% CI)
Lifetime prevalence of IPV				
Female	18.6 (17.0-20.4)	18.7 (17.0-20.5)	17.4 (15.8-19.1)	18.2 (17.3-19.2)
Male	10.3 (8.9-12.0)	11.5 (9.8-13.3)	10.3 (8.6-12.1)	10.7 (9.8-11.7)
State	14.5 (13.4-15.7)	15.1 (13.9-16.4)	13.9 (12.7-15.1)	14.5 (13.8-15.2)
Current prevalence of IPV				
Female	1.3 (0.9 - 2.0)	1.5 (1.0 - 2.3)	1.3 (0.8 - 2.0)	1.4 (1.1 - 1.7)
Male	0.3 (0.2-0.7)	1.1 (0.6 - 2.0)	1.0 (0.5 - 2.0)	0.8 (0.6 - 1.2)
State	0.8 (0.6 - 1.2)	1.3 (0.9 - 1.8)	1.2 (0.8 - 1.7)	1.1 (0.9 - 1.4)

*CI: confidence interval

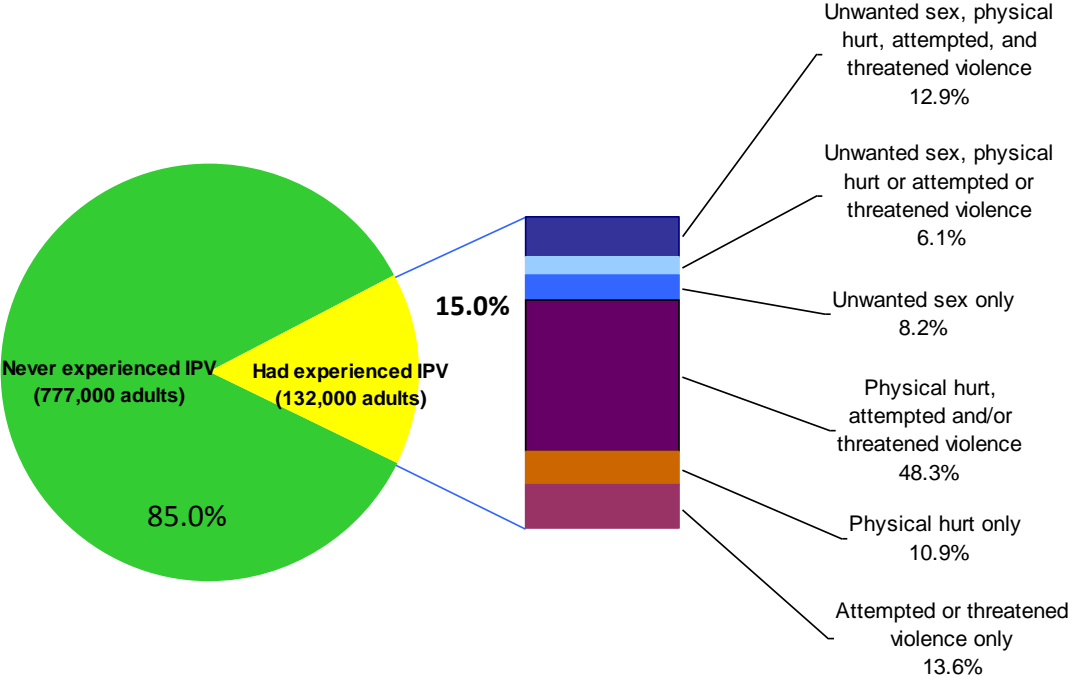
Table 3. Lifetime and current prevalence of IPV by gender, IPV + SV partner were perpetrators

	2006 % (95% CI*)	2007 % (95% CI)	2008 % (95% CI)	2006-2008 % (95% CI)
Lifetime prevalence of IPV				
Female	19.4 (17.7-21.2)	19.1 (17.4-20.9)	18.2 (16.5-19.9)	18.9 (17.9-19.9)
Male	10.6 (9.2-12.3)	12.0 (10.3-13.9)	10.4 (8.8-12.3)	11.0 (10.1-12.1)
State	15.1 (13.9-16.3)	15.6 (14.4-16.9)	14.3 (13.2-15.6)	15.0 (14.3-15.7)
Current prevalence of IPV				
Female	1.4 (0.9-2.1)	1.5 (1.0-2.3)	1.4 (0.9-2.1)	1.4 (1.1-1.8)
Male	0.5 (0.2-1.2)	1.6 (1.0-2.8)	1.0 (0.5-2.0)	1.0 (0.7-1.5)
State	0.9 (0.7-1.4)	1.6 (1.1-2.2)	1.2 (0.8-1.7)	1.2 (1.0-1.5)

*CI: confidence interval

Prevalence in Table 3B slightly higher compare to Table 3.

Figure 2. Average lifetime IPV prevalence in , HBRFSS 2006-2008



Forms of IPV suffered by gender, HBRFSS 2006 - 2008

	Female %	Male %
Unwanted sex, physical hurt, attempted, and threatened violence	18.6	2.3
Unwanted sex, physical hurt or attempted or threatened violence	8.1	2.7
Unwanted sex only	10.7	3.8
Physical hurt, attempted and/or threatened violence	43.6	57.5
Physical hurt only	8.1	15.1
Attempted or threatened violence only	10.9	18.6
Estimated adult victims	84,000	48,000

Results

Table 6. Women lifetime prevalence of rape and AOR* for rape by selected socio-demographics, HBRFSS 2006-2008

	% (95% CI**)	AOR (95% CI)
State overall	13.9 (13.1 - 14.8)	
Age groups		
18-24 years	16.0 (12.6 - 20.0)	2.1 (1.4 - 3.2)
25-34 years	14.1 (11.9 - 16.7)	2.0 (1.4 - 2.9)
35-44 years	16.3 (14.3 - 18.6)	2.4 (1.8 - 3.3)
45-54 years	17.1 (15.3 - 19.0)	2.3 (1.7 - 3.1)
55-64 years	16.2 (14.4 - 18.2)	2.2 (1.7 - 2.9)
>=65 years	6.2 (5.2 - 7.3)	referent
Ethnic groups		
Filipino	5.6 (4.1 - 7.7)	referent
Chinese	8.4 (5.4 - 12.7)	1.7 (0.9 - 3.0)
Japanese	7.6 (6.3 - 9.3)	1.5 (1.0 - 2.3)
Korean	9.6 (5.4 - 16.5)	1.7 (0.8 - 3.4)
Hawaiian	15.4 (12.9 - 18.4)	2.8 (1.9 - 4.1)
White	22.2 (20.7 - 23.8)	4.7 (3.3 - 6.6)
Others	16.0 (13.2 - 19.4)	2.8 (1.8 - 4.2)
Marital status		
Married	11.1 (10.2 - 12.0)	referent
Never married	15.4 (13.1 - 17.9)	1.4 (1.1 - 1.7)
A member of unmarried couple	28.3 (22.1 - 35.4)	2.5 (1.7 - 3.5)
Divorced or Separated	26.8 (23.9 - 29.9)	2.7 (2.2 - 3.3)

Table 20. Men lifetime prevalence of rape and AOR* for rape by selected socio-demographics, HBRFSS 2006-2008

	% (95% CI*)	AOR** (95% CI)
State overall	4.3 (3.7 - 5.0)	
Age groups		
18-24 years	7.2 (4.9 - 10.3)	1.1 (0.5 - 2.5)
25-34 years	5.2 (3.6 - 7.4)	0.9 (0.5 - 1.9)
35-44 years	4.3 (3.1 - 5.9)	1.1 (0.6 - 2.1)
45-54 years	3.6 (2.6 - 4.9)	1.0 (0.5 - 1.9)
55-64 years	3.8 (2.8 - 5.1)	1.2 (0.7 - 2.1)
>=65 years	1.9 (1.3 - 2.7)	referent
Ethnic groups		
Filipino	3.2 (1.9 - 5.3)	referent
Chinese	1.4 (0.6 - 3.1)	0.5 (0.2 - 1.3)
Japanese	2.1 (1.3 - 3.5)	0.7 (0.3 - 1.5)
Korean	_***	_***
Hawaiian	6.0 (4.0 - 8.9)	2.0 (1.0 - 4.0)
White	5.5 (4.6 - 6.7)	2.1 (1.2 - 3.8)
Others	6.1 (4.2 - 9.0)	2.0 (1.0 - 4.0)
Marital status		
Married	2.4 (2.0 - 3.0)	referent
Never married	7.2 (5.6 - 9.1)	3.4 (2.4 - 4.8)
A member of unmarried couple	11.9 (7.4 - 18.5)	4.8 (2.7 - 8.4)
Divorced or Separated	4.8 (3.4 - 6.8)	1.9 (1.3 - 3.0)

Results

Cont. Women

Education level completed		
Less than 12 grade	10.1 (7.2 - 14.1)	0.8 (0.5 - 1.2)
Grade 12 or GED	12.5 (10.9 - 14.4)	0.9 (0.7 - 1.1)
College 1 -3 years	15.4 (13.9 - 17.1)	1.1 (0.9 - 1.3)
College >=4 years	14.3 (13.1 - 15.7)	referent
Employment status		
Retired	7.1 (6.1 - 8.3)	referent
Student/Homemaker	15.5 (13.0 - 18.3)	1.3 (1.0 - 1.9)
Employed	14.7 (13.6 - 15.8)	1.2 (0.9 - 1.5)
Unemployed	25.3 (21.3 - 29.8)	2.1 (1.5 - 2.9)
Annual household income		
< \$25,000	15.8 (13.9 - 17.9)	1.2 (0.9 - 1.6)
\$25,000 - \$49,999	14.6 (13.0 - 16.3)	1.3 (1.0 - 1.6)
\$50,000 - \$74,999	14.2 (12.2 - 16.5)	1.1 (0.9 - 1.4)
\$75,000 or more	13.2 (11.8 - 14.8)	referent
Unknown/Refused	11.0 (8.5 - 14.2)	1.0 (0.7 - 1.4)
County		
Honolulu	12.6 (11.5 - 13.7)	referent
Kauai	16.8 (14.3 - 19.5)	1.3 (1.0 - 1.6)
Maui	16.2 (14.4 - 18.2)	1.1 (0.9 - 1.3)
Hawaii	18.1 (16.4 - 20.1)	1.2 (1.0 - 1.4)

* AOR: Adjusted odds ratio. Adjusted for age, ethnicity, marital status, level of education completed, and employment status.

** CI: confidence interval.

Cont. Men

Education level completed		
Less than 12 grade	6.0 (3.2 - 10.8)	1.1 (0.5 - 2.4)
Grade 12 or GED	3.4 (2.5 - 4.6)	0.6 (0.4 - 0.9)
College 1 -3 years	5.4 (4.1 - 7.1)	1.2 (0.8 - 1.7)
College >=4 years	4.0 (3.2 - 4.9)	referent
Employment status		
Retired	1.7 (1.2 - 2.4)	referent
Student/Homemaker	6.9 (3.5 - 13.1)	1.8 (0.7 - 4.9)
Employed	4.5 (3.8 - 5.3)	1.9 (1.0 - 3.4)
Unemployed	6.7 (4.2 - 10.7)	2.1 (1.0 - 4.6)
Annual household income		
< \$25,000	5.2 (3.8 - 7.2)	1.3 (0.8 - 2.3)
\$25,000 - \$49,999	5.0 (3.7 - 6.7)	1.4 (0.9 - 2.2)
\$50,000 - \$74,999	4.3 (3.1 - 6.0)	1.4 (0.9 - 2.3)
\$75,000 or more	3.2 (2.4 - 4.2)	referent
Unknown/Refused	4.7 (2.9 - 7.5)	1.1 (0.6 - 2.3)
County		
Honolulu	3.7 (3.0 - 4.6)	referent
Kauai	6.5 (4.2 - 9.8)	1.7 (1.0 - 2.9)
Maui	5.6 (4.2 - 7.6)	1.3 (0.9 - 2.0)
Hawaii	5.6 (4.4 - 7.0)	1.3 (0.9 - 1.8)

* AOR: Adjusted odds ratio. Adjusted for age, ethnicity, marital status, level of education completed, and employment status.

** CI: confidence interval.

***Unstable estimates.

Results

Table 7. Women lifetime prevalence of IPV and AOR* for IPV by selected socio-demographics, HBRFSS 2006-2008

	% (95% CI**)	AOR (95% CI)
State overall	18.9 (17.9 - 19.9)	
Age groups		
18-24 years	23.2 (19.0 - 28.1)	2.4 (1.6 - 3.6)
25-34 years	19.7 (17.1 - 22.5)	2.3 (1.6 - 3.2)
35-44 years	22.3 (19.9 - 24.8)	2.6 (1.9 - 3.6)
45-54 years	23.6 (21.5 - 25.8)	2.5 (1.9 - 3.4)
55-64 years	19.1 (17.1 - 21.2)	2.0 (1.5 - 2.6)
>=65 years	8.3 (7.1 - 9.7)	referent
Ethnic groups		
Filipino	12.3 (9.8 - 15.3)	referent
Chinese	11.2 (7.9 - 15.8)	1.1 (0.7 - 1.8)
Japanese	11.6 (9.9 - 13.5)	1.2 (0.8 - 1.6)
Korean	14.0 (8.1 - 23.0)	1.2 (0.6 - 2.4)
Hawaiian	21.5 (18.6 - 24.7)	1.7 (1.3 - 2.4)
White	26.5 (24.8 - 28.3)	2.8 (2.1 - 3.7)
Others	22.4 (18.8 - 26.5)	1.8 (1.3 - 2.5)
Marital status		
Married	14.5 (13.5 - 15.6)	referent
Never married	21.9 (19.1 - 25.0)	1.4 (1.1 - 1.7)
A member of unmarried couple	35.0 (28.1 - 42.7)	2.3 (1.6 - 3.3)
Divorced/Separated	38.1 (34.9 - 41.5)	3.4 (2.9 - 4.1)

Table 21. Men lifetime prevalence of IPV and AOR* for IPV by selected socio-demographics, HBRFSS 2006-2008

	% (95% CI*)	AOR** (95% CI)
State overall	11.1 (10.1 - 12.1)	
Age groups		
18-24 years	14.0 (10.5 - 18.5)	3.3 (1.8 - 5.9)
25-34 years	14.2 (11.5 - 17.4)	3.2 (2.0 - 5.3)
35-44 years	14.4 (12.1 - 17.0)	3.6 (2.3 - 5.6)
45-54 years	11.5 (9.8 - 13.5)	2.6 (1.7 - 4.0)
55-64 years	8.0 (6.7 - 9.5)	1.8 (1.2 - 2.7)
>=65 years	3.4 (2.6 - 4.4)	referent
Ethnic groups		
Filipino	8.7 (6.0 - 12.3)	referent
Chinese	6.6 (4.0 - 10.9)	0.9 (0.5 - 1.7)
Japanese	6.4 (4.8 - 8.4)	0.8 (0.5 - 1.3)
Korean	_***	_***
Hawaiian	12.4 (9.7 - 15.7)	1.5 (0.9 - 2.4)
White	14.6 (13.1 - 16.3)	2.0 (1.4 - 3.1)
Others	13.7 (10.3 - 17.9)	1.5 (0.9 - 2.5)
Marital status		
Married	8.3 (7.3 - 9.3)	referent
Never married	13.8 (11.5 - 16.5)	1.6 (1.2 - 2.1)
A member of unmarried couple	19.9 (13.8 - 27.9)	2.1 (1.3 - 3.4)
Divorced or Separated	19.7 (16.3 - 23.6)	3.0 (2.3 - 4.0)

Results

Cont. Women

Level of education completed		
Less than 12 grade	15.7 (11.8 - 20.6)	1.2 (0.9 - 1.8)
Grade 12 or GED	19.6 (17.5 - 21.8)	1.3 (1.1 - 1.6)
College 1-3 years	21.9 (20.0 - 23.8)	1.4 (1.2 - 1.7)
College ≥4 years	16.3 (15.0 - 17.7)	referent
Employment status		
Retired	9.1 (7.9 - 10.5)	referent
Student/Homemaker	18.7 (15.9 - 22.0)	1.2 (0.8 - 1.6)
Employed	20.8 (19.5 - 22.2)	1.3 (1.0 - 1.6)
Unemployed	32.4 (27.9 - 37.2)	2.0 (1.4 - 2.7)
Annual household income		
< \$25,000	22.7 (20.3 - 25.2)	1.1 (0.9 - 1.4)
\$25,000 - \$49,999	20.1 (18.1 - 22.2)	1.1 (0.9 - 1.4)
\$50,000 - \$74,999	18.2 (15.9 - 20.7)	1.0 (0.8 - 1.2)
\$75,000 or more	17.7 (16.0 - 19.6)	referent
Unknown/Refused	14.2 (11.4 - 17.7)	0.8 (0.6 - 1.1)
County		
Honolulu	17.6 (16.3 - 18.9)	referent
Kauai	18.1 (15.5 - 21.0)	0.9 (0.7 - 1.1)
Maui	21.7 (19.7 - 24.0)	1.0 (0.9 - 1.2)
Hawaii	23.7 (21.7 - 25.8)	1.2 (1.0 - 1.4)

* AOR: Adjusted odds ratio. Adjusted for age, ethnicity, marital status, level of education completed, and employment status.

** CI: confidence interval.

Cont. Men

Level of education completed		
Less than 12 grade	15.7 (10.6 - 22.6)	1.5 (0.9 - 2.5)
Grade 12 or GED	9.5 (7.8 - 11.6)	0.7 (0.5 - 0.9)
College 1 -3 years	12.0 (10.2 - 14.0)	0.9 (0.7 - 1.2)
College ≥4 years	11.0 (9.6 - 12.6)	referent
Employment status		
Retired	3.8 (2.9 - 4.8)	referent
Student/Homemaker	12.1 (7.6 - 18.9)	1.3 (0.6 - 2.6)
Employed	12.4 (11.2 - 13.7)	1.5 (1.0 - 2.2)
Unemployed	13.3 (9.6 - 18.0)	1.4 (0.8 - 2.4)
Annual household income		
< \$25,000	12.5 (10.0 - 15.6)	1.2 (0.8 - 1.7)
\$25,000 - \$49,999	11.7 (9.8 - 13.8)	1.1 (0.8 - 1.5)
\$50,000 - \$74,999	10.6 (8.7 - 13.0)	1.1 (0.8 - 1.4)
\$75,000 or more	10.5 (8.9 - 12.3)	referent
Unknown/Refused	9.9 (6.7 - 14.5)	0.9 (0.5 - 1.5)
County		
Honolulu	10.1 (8.9 - 11.4)	referent
Kauai	13.4 (10.4 - 17.0)	1.4 (1.1 - 1.7)
Maui	11.9 (9.9 - 14.3)	1.3 (0.9 - 1.8)
Hawaii	14.5 (12.5 - 16.8)	1.0 (0.8 - 1.3)

* AOR: Adjusted odds ratio. Adjusted for age, ethnicity, marital status, level of education completed, and employment status.

** CI: confidence interval.

***Unstable estimates.

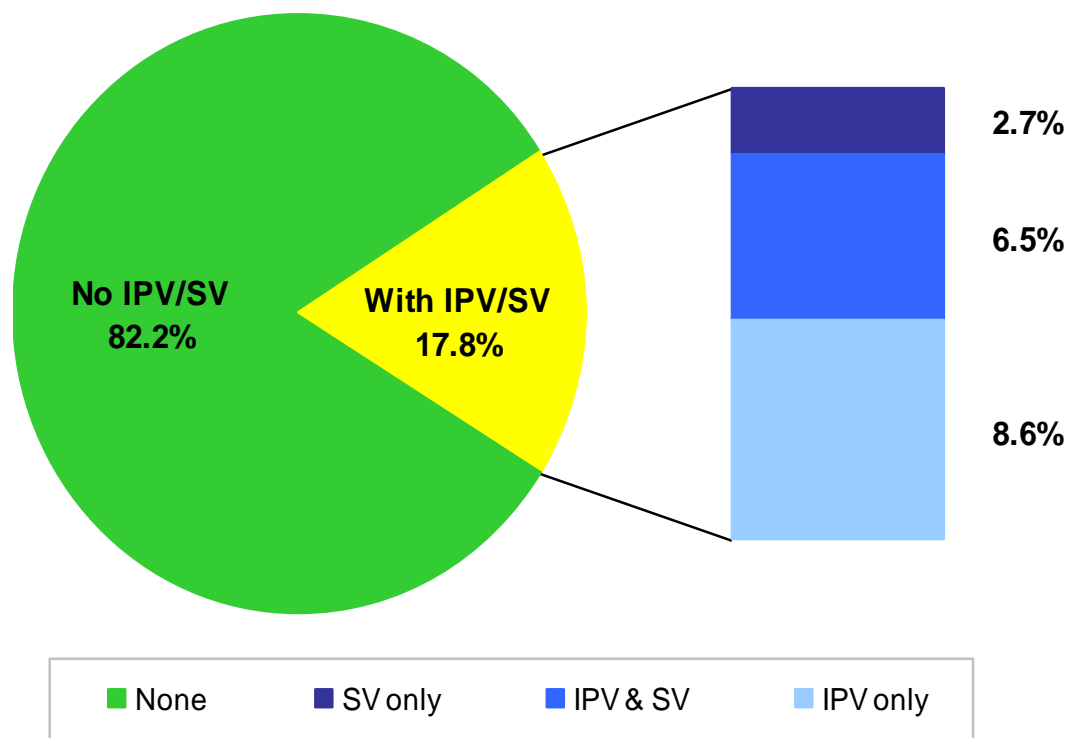
Results: Combining

Table 4. Lifetime and current prevalence of ALE by gender, HBRFSS 2006-2008

	2006 % (95% CI)	2007 % (95% CI)	2008 % (95% CI)	2006-2008 % (95% CI)
Lifetime prevalence of ALE				
Female	23.7 (21.9-25.6)	22.7 (20.9- 24.6)	21.8 (20.1-23.7)	22.7 (21.7-23.8)
Male	12.3 (10.7-14.0)	13.7 (12.0-15.7)	12.4 (10.7-14.4)	12.8 (11.8-13.9)
State	18.0 (16.7-19.3)	18.3 (17.0-19.7)	17.2 (15.9-18.5)	17.8 (17.1-18.6)
Current prevalence of ALE				
Female	2.1 (1.5 - 2.9)	1.9 (1.3 - 2.7)	2.3 (1.6- 3.1)	2.1 (1.7 - 2.5)
Male	1.0 (0.6 - 1.8)	2.3 (1.5 - 3.5)	2.0 (1.2 - 3.2)	1.8 (1.4 - 2.4)
State	1.6 (1.2 - 2.1)	2.1 (1.6 - 2.8)	2.1 (1.6 - 2.8)	1.9 (1.6 - 2.3)

*CI: confidence interval

Figure 3. ALE in Hawaii, HBRFSS 2006-2008



Estimated number of of adults with ALE by gender and type of ALE, HBRFSS 2006-2008

Gender	ALE total # (%)	IPV only # (%)	SV only # (%)	Both IPV and SV # (%)
Women	103,000 (100%)	39,000 (38%)	17,000 (17%)	47,000 (46%)
Men	57,000 (100%)	38,000 (67%)	8,000 (14%)	11,000 (19%)
Total	160,000 (100%)	77,000 (48%)	25,000 (16%)	58,000 (36%)

Results

Mean age (in years) and 95% confidence interval by gender and by ALE, HBRFSS 2006-2008

Gender	No ALE	With ALE	Type of ALE			Recency of ALE	
			IPV only	SV only	Both IPV and SV	ALE past 12 months	ALE more than 12 months
Female	48.9 (48.3-49.5)	43.2 (42.3-44.1)	41.8 (40.2-43.3)	42.6 (40.7-44.6)	44.7 (43.4-46.0)	34.4 (31.6-37.3)	44.1 (43.2-45.0)
Male	45.8 (45.2-46.5)	39.9 (38.6-41.2)	40.1 (38.6-41.7)	41.8 (38.1-45.5)	37.8 (35.1-40.6)	32.4 (29.2-35.5)	41.1 (39.8-42.5)
State	47.3 (46.8-47.7)	42.0 (41.3-42.8)	41.0 (39.9-42.0)	42.4 (40.6-44.2)	43.3 (42.1-44.6)	33.5 (31.3-35.6)	43.1 (42.3-43.9)

Results

Table 8. Women lifetime prevalence of ALE and AOR* for ALE by selected socio- demographics, HBRFSS 2006-2008

	% (95% CI**)	AOR (95% CI)
State overall	22.7 (21.7 - 23.8)	
Age group		
18-24 years	28.5 (23.9 - 33.5)	2.6 (1.8 - 3.8)
25-34 years	23.8 (21.0 - 26.8)	2.3 (1.7 - 3.2)
35-44 years	26.7 (24.1 - 29.4)	2.7 (2.1 - 3.6)
45-54 years	27.9 (25.7 - 30.2)	2.6 (2.0 - 3.4)
55-64 years	23.1 (21.0 - 25.4)	2.1 (1.6 - 2.6)
>=65 years	9.9 (8.6 - 11.4)	referent
Ethnic groups		
Filipino	13.3 (10.7 - 16.3)	referent
Chinese	13.7 (10.0 - 18.5)	1.3 (0.8 - 2.0)
Japanese	14.4 (12.5 - 16.5)	1.4 (1.0 - 1.9)
Korean	16.0 (9.8 - 25.1)	1.3 (0.7 - 2.4)
Hawaiian	25.7 (22.6 - 29.1)	2.1 (1.5 - 2.8)
White	32.4 (30.7 - 34.3)	3.4 (2.6 - 4.5)
Others	26.6 (22.7 - 30.9)	2.1 (1.5 - 2.9)
Marital status		
Married	18.0 (16.8 - 19.1)	referent
Never married	26.7 (23.7 - 30.0)	1.4 (1.2 - 1.7)
A member of unmarried couple	41.9 (34.5 - 49.7)	2.4 (1.7 - 3.4)
Divorced/Separated	41.7 (38.4 - 45.1)	3.1 (2.6 - 3.7)

Table 22. Men lifetime prevalence of ALE and AOR* for ALE by selected socio-demographics, HBRFSS 2006-2008

	% (95% CI*)	AOR** (95% CI)
State overall	12.8 (11.8 - 13.9)	
Age group		
18-24 years	16.6 (12.8 - 21.2)	2.4 (1.4 - 4.1)
25-34 years	16.4 (13.5 - 19.8)	2.3 (1.5 - 3.7)
35-44 years	15.6 (13.3 - 18.3)	2.5 (1.7 - 3.7)
45-54 years	13.0 (11.2 - 15.1)	2.0 (1.3 - 2.9)
55-64 years	10.1 (8.5 - 11.9)	1.6 (1.1 - 2.2)
>=65 years	4.6 (3.6 - 5.7)	referent
Ethnic groups		
Filipino	9.7 (7.0 - 13.4)	referent
Chinese	7.5 (4.7 - 11.8)	0.9 (0.5 - 1.6)
Japanese	7.0 (5.4 - 9.0)	0.8 (0.5 - 1.3)
Korean	7.7 (2.8 - 19.6)	0.6 (0.2 - 2.1)
Hawaiian	15.8 (12.7 - 19.5)	1.7 (1.1 - 2.7)
White	17.0 (15.4 - 18.8)	2.2 (1.5 - 3.1)
Others	15.5 (11.9 - 19.8)	1.6 (1.0 - 2.6)
Marital status		
Married	9.4 (8.4 - 10.6)	referent
Never married	16.5 (14.0 - 19.3)	1.8 (1.4 - 2.3)
A member of unmarried couple	24.5 (17.7 - 32.8)	2.4 (1.5 - 3.8)
Divorced or Separated	21.8 (18.3 - 25.8)	2.9 (2.2 - 3.8)

Results

Cont. Women

Level of education completed		
Less than 12 grade	18.2 (14.1 - 23.2)	1.1 (0.8 - 1.6)
Grade 12 or GED	22.5 (20.3 - 24.8)	1.1 (1.0 - 1.4)
College 1-3 years	25.8 (23.8 - 27.8)	1.3 (1.1 - 1.5)
College >=4 years	21.0 (19.5 - 22.6)	referent
Employment status		
Retired	11.0 (9.7 - 12.5)	referent
Student/Homemaker	23.5 (20.4 - 26.9)	1.2 (0.9 - 1.6)
Employed	25.0 (23.5 - 26.4)	1.3 (1.0 - 1.6)
Unemployed	37.7 (32.9 - 42.7)	2.0 (1.5 - 2.8)
Annual household income		
< \$25,000	26.4 (23.9 - 29.1)	1.2 (0.9 - 1.5)
\$25,000 - \$49,999	23.8 (21.7 - 26.0)	1.2 (1.0 - 1.4)
\$50,000 - \$74,999	22.8 (20.4 - 25.5)	1.1 (0.9 - 1.3)
\$75,000 or more	21.6 (19.8 - 23.6)	referent
Unknown/Refused	17.2 (14.1 - 20.8)	0.8 (0.6 - 1.1)
County		
Honolulu	21.0 (19.6 - 22.4)	referent
Kauai	24.2 (21.2 - 27.4)	1.1 (0.9 - 1.3)
Maui	25.7 (23.5 - 28.1)	1.1 (0.9 - 1.2)
Hawaii	29.0 (26.9 - 31.3)	1.2 (1.1 - 1.5)

* AOR: Adjusted odds ratio. Adjusted for age, ethnicity, marital status, level of education completed, and employment status.

** CI: confidence interval.

Cont. Men

Level of education completed		
Less than 12 grade	17.7 (12.3 - 24.8)	1.4 (0.8 - 2.3)
Grade 12 or GED	10.9 (9.1 - 13.1)	0.7 (0.5 - 0.9)
College 1 -3 years	14.4 (12.4 - 16.5)	1.0 (0.8 - 1.3)
College >=4 years	12.7 (11.2 - 14.3)	referent
Employment status		
Retired	4.6 (3.7 - 5.7)	referent
Student/Homemaker	13.7 (8.8 - 20.7)	1.3 (0.7 - 2.6)
Employed	14.3 (13.1 - 15.7)	1.7 (1.2 - 2.5)
Unemployed	15.9 (12.0 - 20.9)	1.7 (1.0 - 2.7)
Annual household income		
< \$25,000	14.3 (11.6 - 17.4)	1.1 (0.8 - 1.6)
\$25,000 - \$49,999	13.9 (11.8 - 16.1)	1.1 (0.9 - 1.5)
\$50,000 - \$74,999	12.6 (10.5 - 15.1)	1.1 (0.8 - 1.5)
\$75,000 or more	11.9 (10.3 - 13.7)	referent
Unknown/Refused	11.8 (8.3 - 16.5)	0.9 (0.6 - 1.5)
County		
Honolulu	11.6 (10.3 - 13.0)	referent
Kauai	17.0 (13.5 - 21.1)	1.5 (1.1 - 2.0)
Maui	14.5 (12.2 - 17.2)	1.1 (0.9 - 1.4)
Hawaii	16.7 (14.5 - 19.0)	1.3 (1.1 - 1.7)

* AOR: Adjusted odds ratio. Adjusted for age, ethnicity, marital status, level of education completed, and employment status.

** CI: confidence interval.

Results

Table 9. Prevalence of selected health indicators for women by ALE, HBRFSS 2006-2008

Selected health indicators	No ALE % (95% CI*)	With ALE % (95% CI)
Risk behavior		
Current smoking	11.8 (10.8-12.8)	24.3 (22.1-26.7)
Binge drinking	8.0 (7.2 - 9.0)	17.8 (15.6- 20.1)
Heavy drinking	4.7 (4.1 - 5.4)	9.0 (7.6 - 10.6)
No leisure time physical activity	22.6 (21.3-24.0)	21.1 (19.0-23.5)
Test screening		
Ever tested for HIV (age < 65 years, excludes blood donation)	29.5 (27.8-31.1)	54.2 (51.4-57.1)
Ever had a Pap smear	92.4 (91.4 -93.3)	96.4 (94.9 - 97.5)
Health care access		
No health care coverage	4.9 (4.2-5.8)	8.5 (7.1-10.1)
Could not see a doctor due to cost	6.0 (5.2-6.9)	13.4 (11.6-15.4)
Emotional support and life satisfaction		
Sometimes, rarely, or never received emotional support needed	20.2 (19.0-21.5)	25.1 (22.8-27.5)
Dissatisfied or very dissatisfied with life	2.3 (1.8-2.8)	9.2 (7.8-11.0)

Table 10. Association between ALE and selected health indicators for women, HBRFSS 2006-2008

Selected health indicators	AOR**(95%CI)
Risk behavior	
Current smoking	1.8 (1.5 - 2.2)
Binge drinking	1.9 (1.5 - 2.3)
Heavy drinking	1.6 (1.2 - 2.0)
No leisure time physical activity	1.0 (0.9 - 1.2)
Test screening	
Ever tested for HIV (age < 65 years, excludes blood donation)	2.7 (2.3 - 3.2)
Ever had a Pap smear	2.7 (1.8 - 4.1)
Health care access	
No health care coverage	1.2 (0.9 - 1.6)
Could not see a doctor due to cost	1.8 (1.4 - 2.3)
Emotional support and life satisfaction	
Sometimes, rarely, or never received emotional support needed	20.2 (19.0-21.5)
Dissatisfied or very dissatisfied with life	2.3 (1.8-2.8)

Results

Cont. Table 9 Women

Self perception of general health

General health fair or poor	14.0 (13.0-15.0)	18.1 (16.2-20.3)
-----------------------------	------------------	-------------------------

Physical health condition

Cardiovascular disease	5.8 (5.2-6.5)	5.3 (4.3-6.4)
------------------------	---------------	---------------

Diabetes	8.4 (7.6-9.2)	6.6 (5.5-7.9)
----------	---------------	---------------

Current asthma	9.8 (8.9-10.7)	14.3 (12.6-16.3)
----------------	----------------	-------------------------

Obesity (BMI≥30)	18.7 (17.6-20.0)	23.5 (21.4-25.8)
------------------	------------------	-------------------------

Had activity limitation	13.1 (12.2-14.0)	25.2 (23.1-27.5)
-------------------------	------------------	-------------------------

Used special equipment	5.8 (5.2-6.5)	6.5 (5.4-7.8)
------------------------	---------------	---------------

Mental health condition

Frequent mental distress (FMD)	7.6 (6.8 - 8.5)	17.0 (15.1-19.1)
--------------------------------	-----------------	-------------------------

Serious psychological distress (SPD)	1.6 (1.1 - 2.3)	6.2 (4.1-9.3)
--------------------------------------	-----------------	----------------------

Receiving mental health treatment	5.5 (4.5 - 6.8)	15.3 (12.5-18.5)
-----------------------------------	-----------------	-------------------------

Current depression	6.2 (5.2-7.2)	17.5 (15.1-20.2)
--------------------	---------------	-------------------------

Lifetime depression	8.3 (7.3-9.4)	27.6 (25.0-30.4)
---------------------	---------------	-------------------------

Lifetime anxiety	7.3 (6.4-8.4)	20.9 (18.6-23.4)
------------------	---------------	-------------------------

Cont. Table 10 Women

Self perception of general health

General health fair or poor	1.6 (1.3 - 1.9)
-----------------------------	------------------------

Physical health condition

Cardiovascular disease	1.1 (0.9 - 1.5)
------------------------	-----------------

Diabetes	1.1 (0.8 - 1.4)
----------	-----------------

Current asthma	1.3 (1.1 - 1.6)
----------------	------------------------

Obesity (BMI≥30)	1.1 (0.9 - 1.3)
------------------	-----------------

Had activity limitation	2.2 (1.9 - 2.6)
-------------------------	------------------------

Used special equipment	1.6 (1.2 - 2.2)
------------------------	------------------------

Mental health condition

Frequent mental distress (FMD)	2.2 (1.8 - 2.7)
--------------------------------	------------------------

Serious psychological distress (SPD)	3.7 (2.0 - 7.0)
--------------------------------------	------------------------

Receiving mental health treatment	3.0 (2.0 - 4.3)
-----------------------------------	------------------------

Current depression	2.7 (2.1 - 3.6)
--------------------	------------------------

Lifetime depression	3.2 (2.6 - 3.9)
---------------------	------------------------

Lifetime anxiety	2.7 (2.2 - 3.4)
------------------	------------------------

*CI: confidence interval.

**AOR: Adjusted odds ratio. Adjusted for age, ethnicity, marital status, level of education completed, and employment status.

Results

Table 23. Prevalence of selected health indicators for men by lifetime experience of IPV/SV , HBRFSS 2006-2008			Table 24. Association between lifetime experience of IPV/SV and selected health indicators for men, HBRFSS 2006-2008	
Selected health indicators	No IPV/ SV % (95% CI*)	With IPV/ SV % (95% CI)	Selected health indicators	AOR**(95%CI)
Risk behavior			Risk behavior	
Current smoking	17.0 (15.7-18.4)	33.6 (29.4-38.1)	Current smoking	2.3 (1.8 - 2.9)
Binge drinking	24.6 (23.1-26.2)	39.3 (35.0-43.9)	Binge drinking	1.7 (1.4 - 2.1)
Heavy drinking	8.1 (7.2-9.1)	13.7 (11.0-16.9)	Heavy drinking	1.7 (1.2 - 2.3)
No leisure time physical activity	14.1 (13.0-15.3)	13.6 (10.9-16.8)	No leisure time physical activity	1.0 (0.8 - 1.4)
Test screening			Test screening	
Ever tested for HIV (age < 65 years, excludes blood donation)	30.0 (28.3-31.8)	52.3 (47.6-56.9)	Ever tested for HIV (age < 65 years, excludes blood donation)	2.3 (1.9 - 2.9)
Health care access			Health care access	
No health care coverage	7.3 (6.4-8.4)	13.9 (11.0-17.5)	No health care coverage	1.5 (1.1 - 2.1)
Could not see a doctor due to cost	5.3 (4.5-6.1)	12.9 (10.2-16.2)	Could not see a doctor due to cost	2.0 (1.5 - 2.8)
Emotional support and life satisfaction			Emotional support and life satisfaction	
Sometimes/rarely/never received emotional support needed	25.1 (23.6-26.6)	28.4 (24.5-32.6)	Sometimes/rarely/never received emotional support needed	1.4 (1.1 - 1.8)
Dissatisfied or very dissatisfied with life	3.6 (3.0-4.3)	7.0 (5.4-8.9)	Dissatisfied or very dissatisfied with life	1.8 (1.3 - 2.6)

Results

Cont. Table 23 Men

Cont. Table 24
Men

Self perception of general health

General health fair or poor	14.3 (13.2-15.5)	13.6 (11.1-16.7)
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Physical health condition

Cardiovascular disease	7.9 (7.1-8.7)	6.2 (4.5-8.5)
------------------------	---------------	---------------

Diabetes	8.0 (7.3-8.9)	5.2 (3.7-7.1)
----------	---------------	---------------

Current asthma	6.6 (5.7-7.6)	8.4 (5.9-11.9)
----------------	---------------	----------------

Obesity (BMI≥30)	24.4 (22.9-25.9)	20.8 (17.3-24.6)
------------------	------------------	------------------

Had activity limitation	14.0 (12.9-15.0)	24.2 (20.9-27.9)
-------------------------	------------------	-------------------------

Used special equipment	5.0 (4.4-5.7)	6.1 (4.5-8.2)
------------------------	---------------	---------------

Mental health condition

Frequent mental distress (FMD)	6.8 (5.9-7.8)	12.9 (10.3-16.1)
--------------------------------	---------------	-------------------------

Serious psychological distress (SPD)	1.8 (1.1-2.8)	4.2 (2.3-7.5)
--------------------------------------	---------------	---------------

Receiving mental health treatment	4.5 (3.5-5.8)	5.2 (3.5-7.6)
-----------------------------------	---------------	---------------

Current depression	5.0 (4.1-6.0)	12.9 (9.6-17.2)
--------------------	---------------	------------------------

Lifetime depression	5.1 (4.3-6.0)	15.6 (12.3-19.6)
---------------------	---------------	-------------------------

Lifetime anxiety	4.9 (4.2-5.9)	15.2 (11.7-19.5)
------------------	---------------	-------------------------

Self perception of general health

General health fair or poor	1.2 (0.9 - 1.5)
-----------------------------	-----------------

Physical health condition

Cardiovascular disease	1.4 (0.9 - 2.1)
------------------------	-----------------

Diabetes	1.0 (0.7 - 1.4)
----------	-----------------

Current asthma	1.2 (0.8 - 1.8)
----------------	-----------------

Obesity (BMI≥30)	0.7 (0.5 - 0.9)
------------------	------------------------

With activity limitation	2.4 (1.9 - 3.1)
--------------------------	------------------------

Use special equipment	1.7 (1.2 - 2.5)
-----------------------	------------------------

Mental health condition

Frequent mental distress (FMD)	1.9 (1.4 - 2.6)
--------------------------------	------------------------

Serious psychological distress (SPD)	2.2 (1.0 - 5.1)
--------------------------------------	-----------------

Receiving mental health treatment	1.1 (0.6 - 1.9)
-----------------------------------	-----------------

Current depression	3.0 (1.9 - 4.5)
--------------------	------------------------

Lifetime depression	3.1 (2.2 - 4.5)
---------------------	------------------------

Lifetime anxiety	3.4 (2.3 - 4.9)
------------------	------------------------

**Adjusted odds ratio. Adjusted for age, ethnicity, marital status, education level completed, and employment status

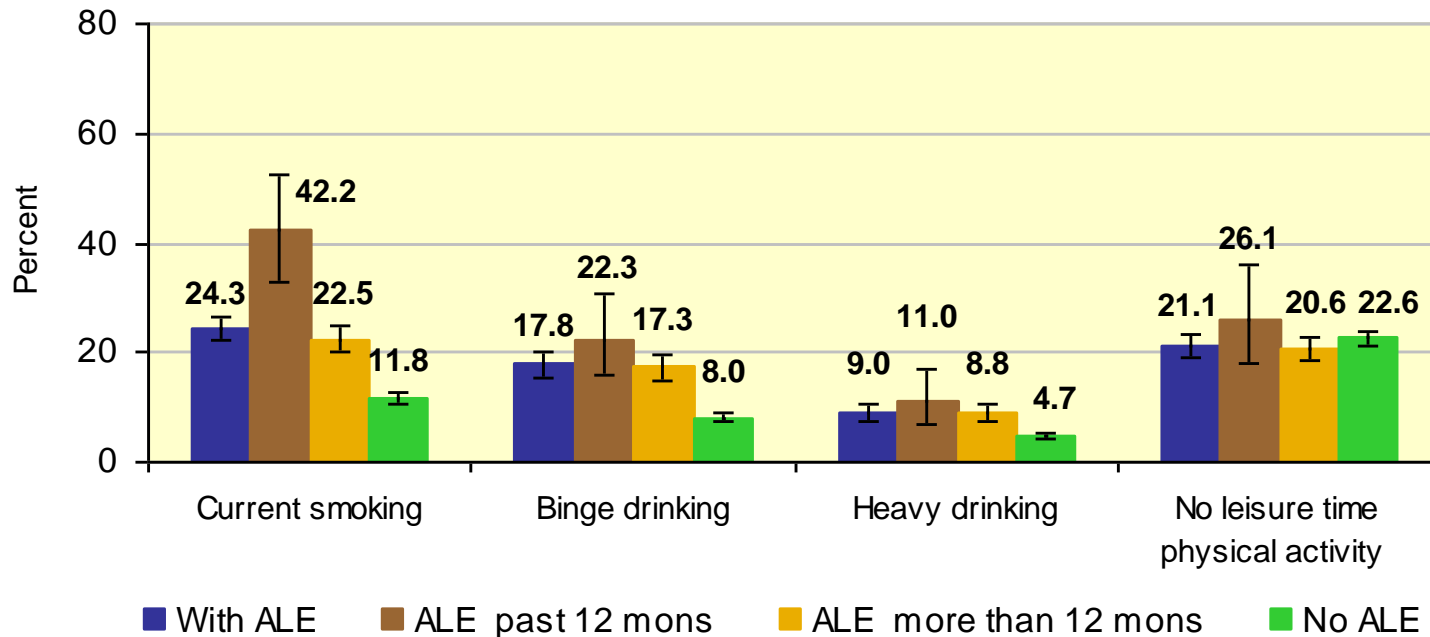
Results : Recency

**Estimated number of adults who had ALE by recency of ALE, HBRFSS
2006-2008**

Gender	ALE total # (%)	ALE past 12 months # (%)	ALE more than 12 months # (%)
Women	103,000 (100%)	9,000 (9%)	94,000 (91%)
Men	57,000 (100%)	8,000 (14%)	49,000 (86%)
Total	160,000 (100%)	17,000 (11%)	143,000 (89%)

Results

Figure 10. Prevalence of risk behaviors for women by recency of ALE, HBRFSS 2006-2008

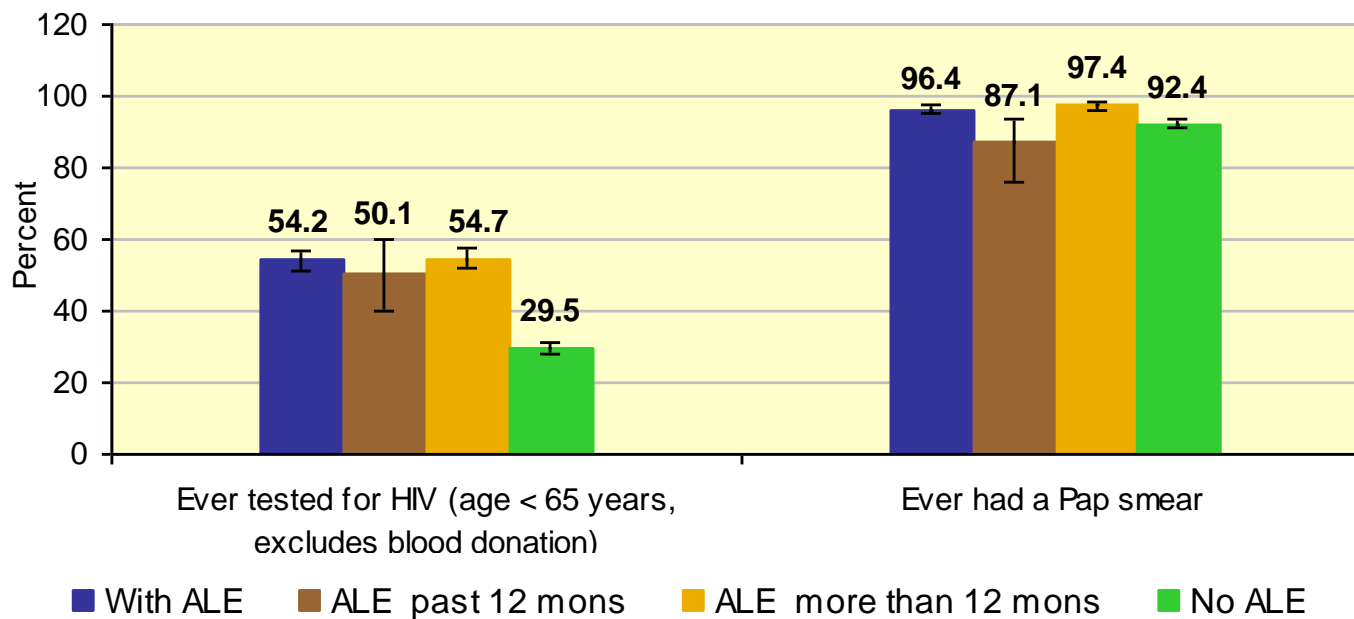


Smoking prevalence for recent victims is quite high compared to past victims and non-victims.

Prevalence of alcohol consumption either as heavy drinking or binged drinking is statistically significantly higher among victims regardless of recency compared to non-victims.

Results

Figure 11. Prevalence of health test screening for women by recency of ALE, HBRFSS 2006-2008

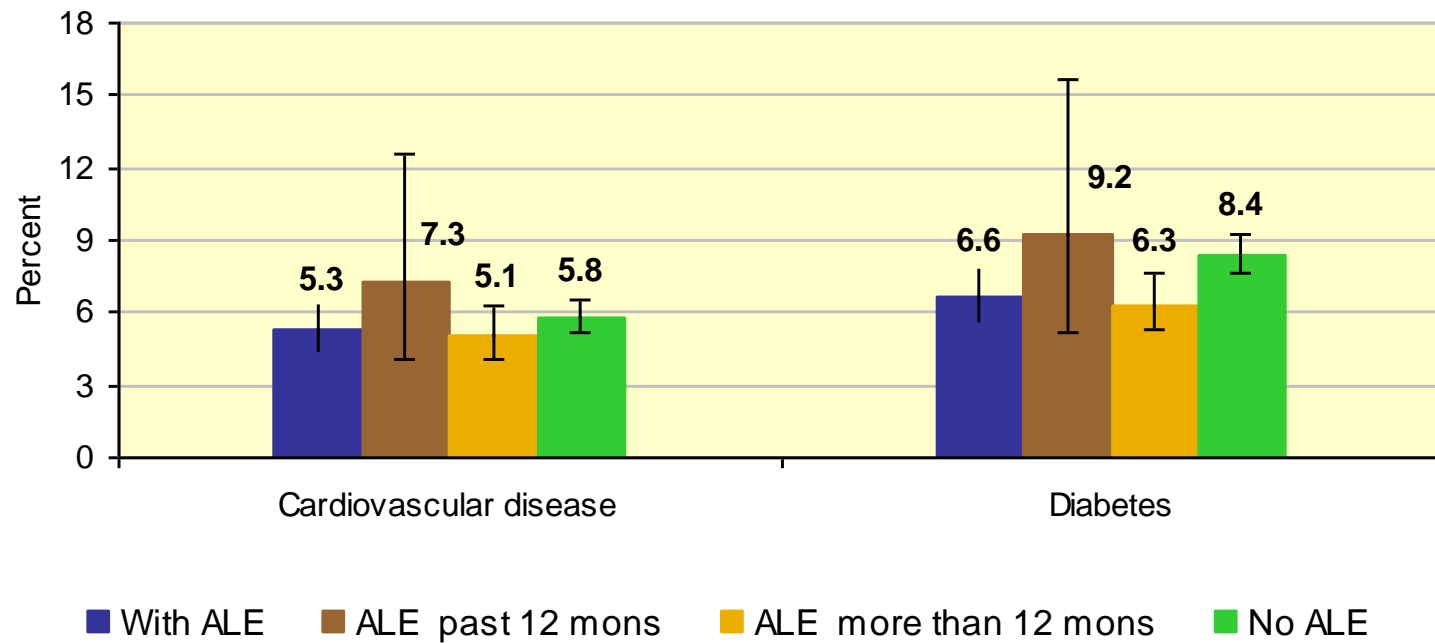


Regardless of recency, women victims were likely to have been tested for HIV.

Recent victims were less likely to have had pap smear, but not significantly different from non-victims.

Results

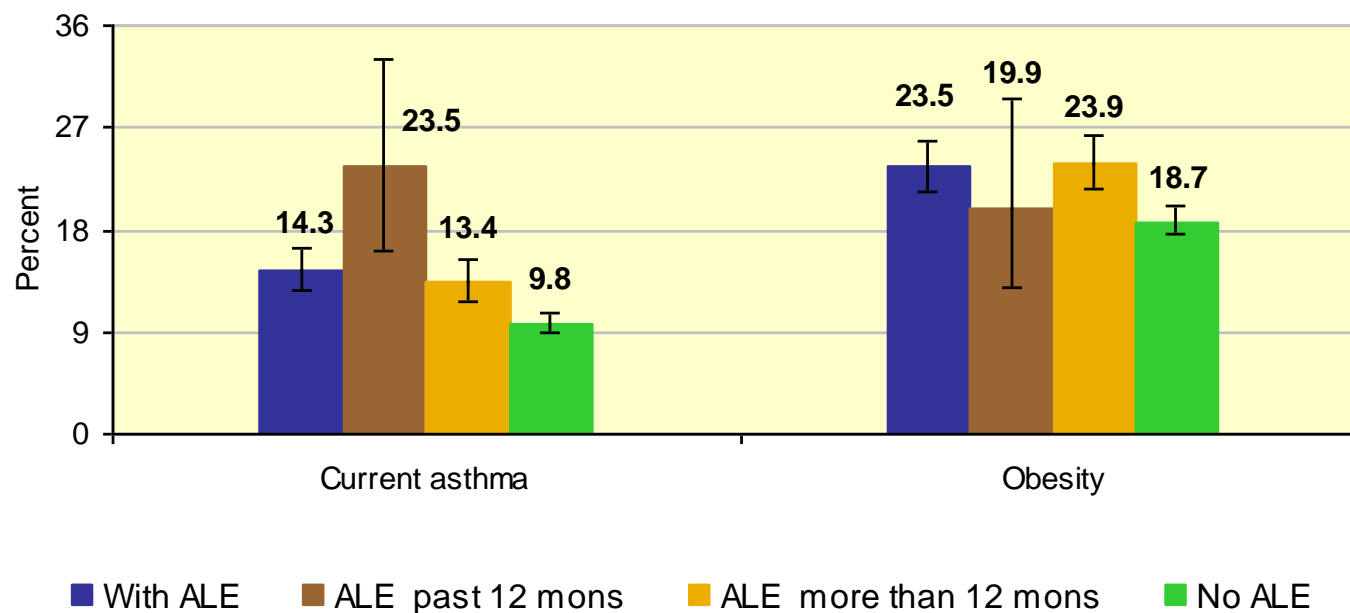
Figure 4. Prevalence of cardiovascular disease and diabetes for women by recency of ALE, HBRFSS 2006-2008



Higher for women who are recent victims but not statistically higher than those who were not victims.

Results

Figure 5. Prevalence of current asthma for women by recency of ALE, HBRFSS 2006-2008

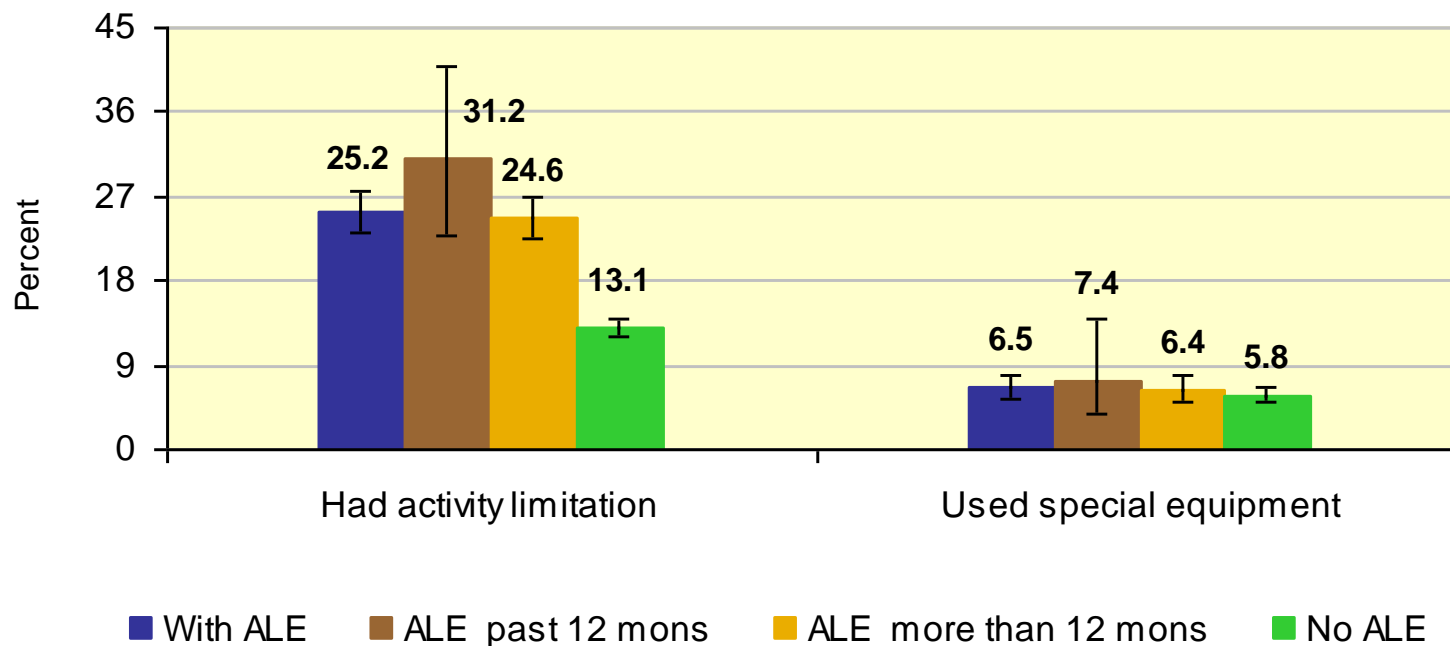


Women who are recent victims are more likely to report having asthma than victims more than 12 months prior to the survey and non-victims.

Women victims more than 12 months prior to the survey are more likely to be obese than recent victims or non-victims.

Results

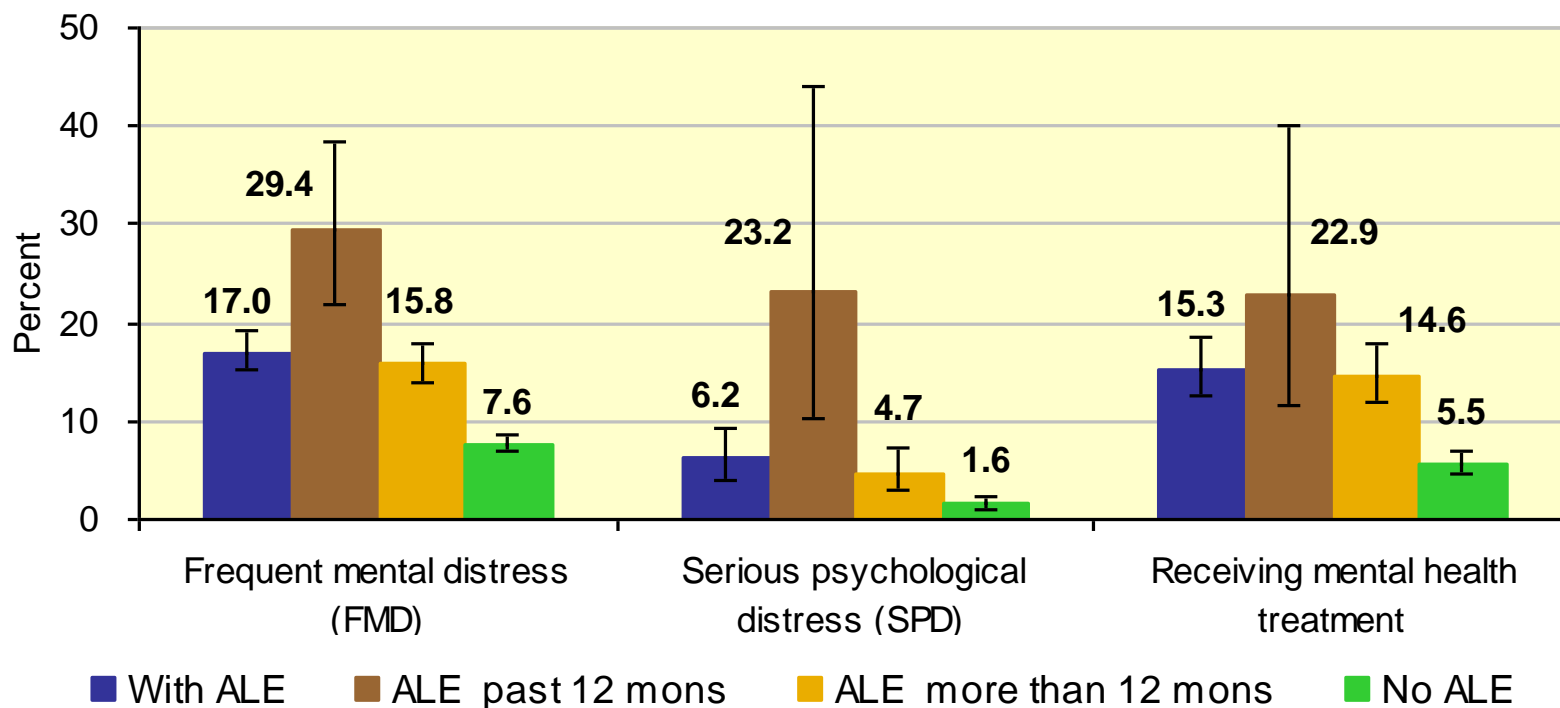
Figure 6. Prevalence of had activity limitation and used special equipment by recency of ALE, HBRFSS 2006-2008



Victims experience activity limitation. Statistically significantly higher regardless of recency of experience.

Results

Figure 7. Prevalence of FMD (HBRFSS 2006-2008), SPD and receiving mental health treatment (HBRFSS 2007) for women by recency of ALE

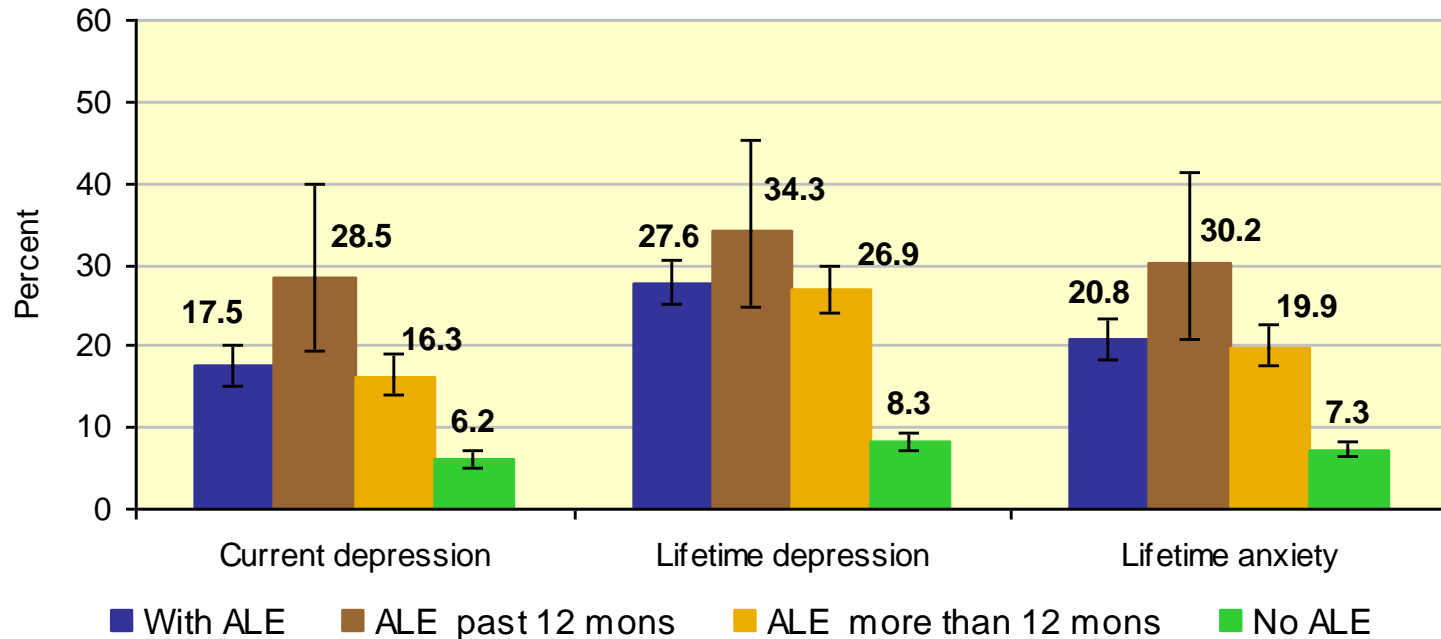


Recent victims were likely to exhibit symptoms of FMD or SPD than past victims. Both victims were likely to have the FMD and SPD symptoms than non-victims.

Regardless of recency, victims were likely to receive medical treatment for their emotional or mental health problems.

Results

Figure 8. Prevalence of current depression, lifetime depression, lifetime anxiety for women by recency of ALE, HBRFSS 2006 & 2008

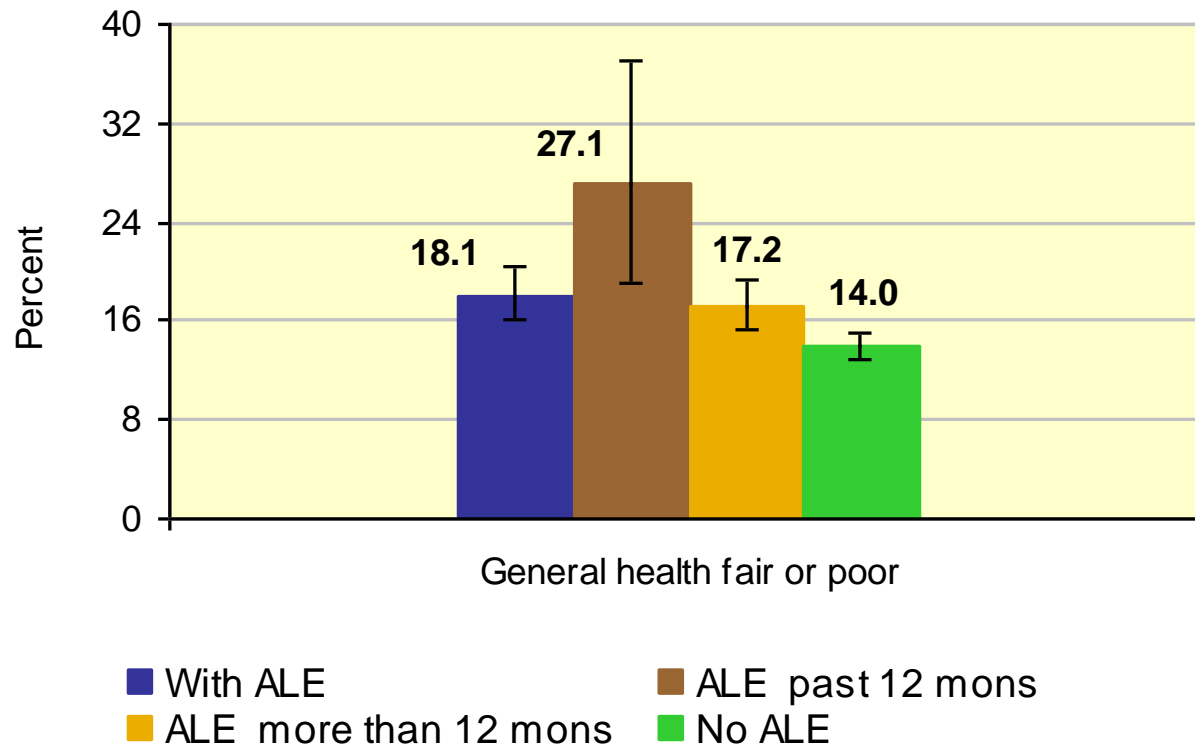


Using the PHQ-8 questions to estimate current depression (algorithm #2), recent victims were more likely to exhibit symptoms of current depression than past victims and non-victims.

Regardless of recency, victims were more likely to have been told that they had depression of anxiety by a health professional than non-victims.

Results

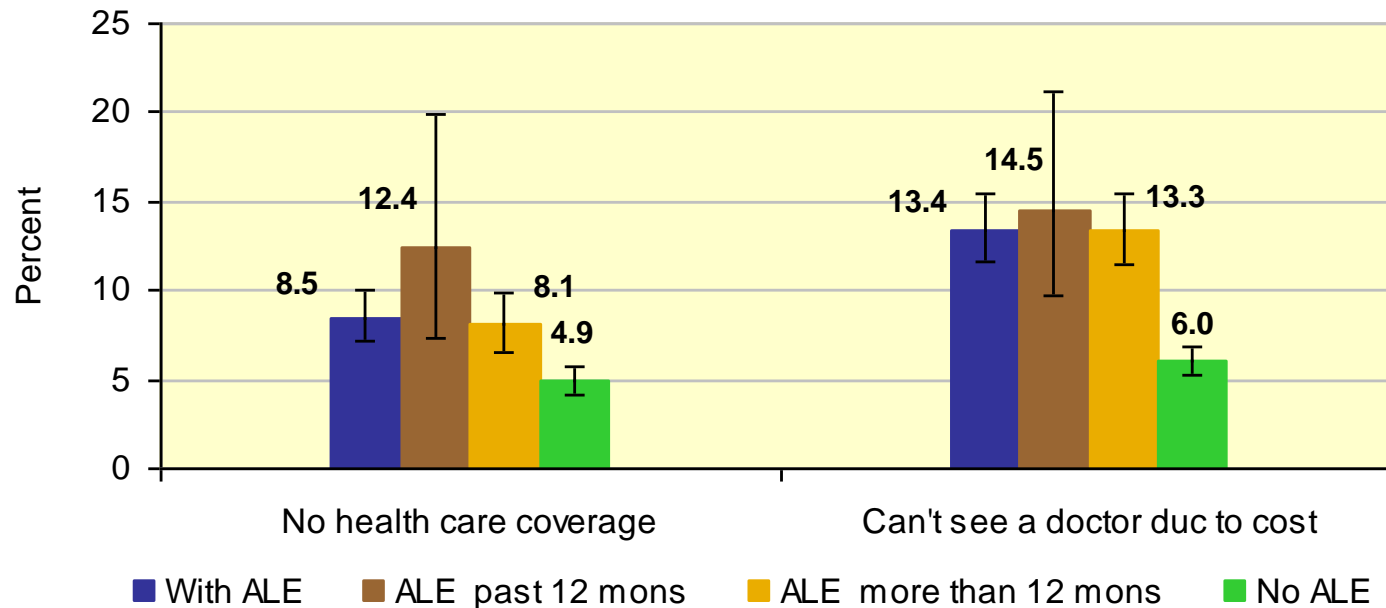
Figure 9. Prevalence of fair or poor general health for women by recency of ALE, HBRFSS 2006 - 2008



Recent victims are more likely to perceived their general health as fair or poor than past victims or non-victims (statistically significantly different).

Results

Figure 10. Prevalence of health care access for women by recency of ALE, HBRFSS 2006-2008

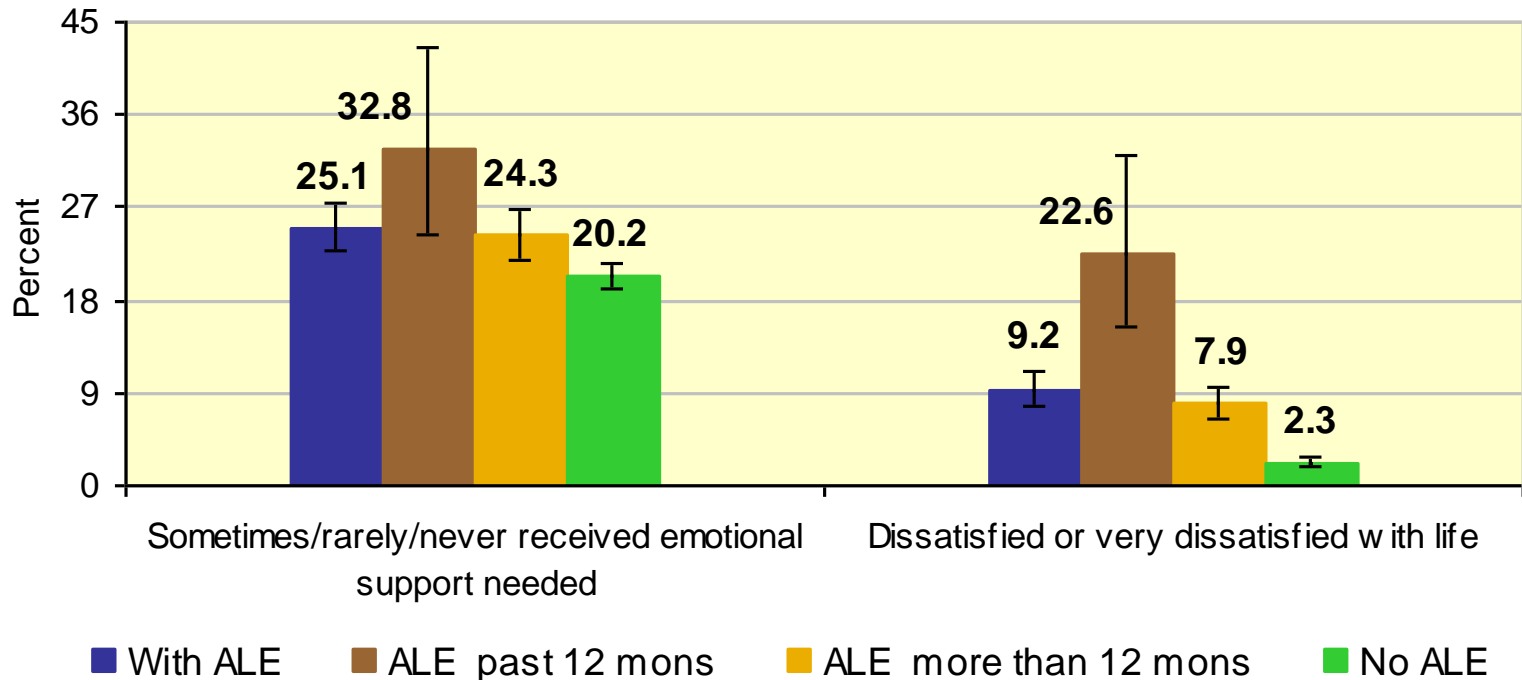


Higher proportion of women victims, particularly recent victims have no health insurance coverage

Similarly, higher proportion of women victims than non-victims were not able to see a doctor when needed due to cost.

Results

Figure 11. Prevalence of lack of emotional support needed and life dissatisfaction for women by recency of ALE, HBRFSS 2006-2008



Many victims received emotional support at best only sometimes compare to non-victims. % of recent victims reported lack of emotional support is not statistically significantly different from victims of more than 12 months.

Recent victims are more likely to be at least dissatisfied with life than victims of more than 12 months prior to the survey or non-victims.

Summary and recommendations

1. *Prevalence estimates of ALE are difficult to measure due to sensitiveness of the issues; require a battery of questions.*
2. *The gender difference in ALE prevalence such as rape and intimate partner violence appear to be disappearing as reflected in the men/women current prevalence rates; on-going surveillance is needed to see if the trend is real.*
3. *Adults with ALE are generally younger than the general population, with men younger by about three years on average, compared to women. The age difference of men and women who are either victims of rape or IPV is just about a year. However, the age difference between gender widens by as much as 7 years when both gender are victims of IPV or rape. Recent victims of IPV or rape are about 10 years younger than victims of distant past regardless of gender.*

Summary and recommendations

4. *For women, no statistical difference across age groups except at age 65 and older in prevalence of rape or IPV. For men, the prevalence of either rape or IPV appears to decline with increasing age group. However, after adjusting for control variables, no real differences across age groups for rape victims; differences in IPV male prevalence across age groups except at age 65 and older.*
5. *Higher prevalence of ALE for women of White, Hawaiian or other ethnic background compared to women of Asian origins such Filipinos, Chinese, Japanese, Koreans. For men, only Whites have significantly higher prevalence of rape or IPV than the rest of the ethnic groups. However, when data were combined, Hawaiians as well as the other group showed a relatively higher ALE prevalence.*
6. *Strong associations of marital status with ALE, non-married more likely to have had experienced ALE than married. Observations true for both gender.*

Summary and recommendations

7. *Unemployed women are more likely to have had experience ALE compared to other women.*
8. *Household incomes does not have relationship with ALE.*
9. *The relationship of education with ALE is not clear.*
10. *ALE is strongly associated with smoking and alcohol consumption regardless of gender. Prevalence of smoking among women who are recent victims is statistically significantly higher compared to women victims in distant past.*
11. *ALE is strongly associated with HIV screening for both gender. Women who experience ALE are more likely to have had PAP smear test done.*

Summary and recommendations

- 12. ALE victims are more likely to express at least dissatisfaction with life regardless of gender. However, the prevalence of life dissatisfactions is statistically significantly higher for women who are recent victims than women victims of distant past.*
- 13. At best, adults with ALE received emotional support only sometimes or less compared to non-victims.*
- 14. ALE victims, regardless of gender have less access to health care, i.e. they are more likely not to see a doctor when needed due to cost. Men victim are more likely to have no health insurance coverage than non-victims.*
- 15. The prevalence of current asthma is statistically significantly higher for women ALE victims and even more so for recent victims compared to non-victims.*

Summary and recommendations

- 16. Regardless of gender, ALE victims prevalence of disability as indicated by activity limitation due to poor health (physical, mental, emotional) and or use of special equipment is statistically significantly higher than non-victims.*
- 17. For women, all indicators of mental health suggest statistically significantly higher prevalence than non-victims. The prevalence of derived measures such as FMD, SPD and current depression is even statistically significantly higher for women who experienced ALE recently than women who experienced ALE in distant past.*
- 18. For men ALE victim, prevalence of derived measures such FMD and current depression and health professional diagnosis of depression and anxiety disorder are statistically significantly higher than non-victims.*

Summary and recommendations

19. Compared to women non-victims, women ALE victims are likely to report that their general health is fair or poor and even more so for recent victims of ALE.

20. However, for men, ALE victims are just as likely as non-victims to report that their health is fair or poor.

- **This presentation showed significant association of ALE with non-optimum health and more so for mental health. Societal infrastructure has to be reinforced to minimize ALE if not totally eliminating it.**
- **Cultural barriers have to be broken down to educate victims of ALE to speak out before it is too late. For intergenerational victims and or witness of ALE, a more intensive effort maybe made for them to come out of their cocoon.**

😊 THANK YOU 😊
To

Participants in today's conference.